NOTES AND COMMENTS

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AN ISOLATED POPULATION OF THE BOG ELFIN, INCISALIA LANORAIEENSIS SHEPPARD (LEPIDOPTERA: LYCAENIDAE), IN CENTRAL NEW YORK

The Bog Elfin, *Incisalia lanoraieensis* Sheppard, has heretofore been known in the United States only from Maine and New Hampshire, in acid *Sphagnum*-heath bogs (Opler and Krizek, 1984:101). Although the food plant, Black Spruce (*Picea mariana*, Pinaceae), is widespread in the northern United States and Canada (Collingwood and Brush, 1984:78–79), the distribution and biology of *I. lanoraieensis* remain poorly understood. Erhlich and Erhlich (1961:204) mentioned an "unverified" report of *I. lanoraieensis* from near Ithaca, New York; the specimen in question is now lost. Shapiro (1974:17), in his discussion of *I. niphon* (Hübner), described a series of smaller, "dull, dark" *I. niphon* from the Finger Lakes region of New York which may represent a separate species; he assigned Ehrlich and Ehrlich's report to this entity. No description of habitat was given. I report here confirmation that *I. lanoraieensis* occurs in New York State, for a State record, together with notes on range extensions of other butterflies in Onondaga County.

On 9 May 1986 I discovered a colony of I. lanoraieensis in the Cicero Swamp State Wildlife Management Area, Onondaga County, near Syracuse. The butterflies appeared to be restricted to a small area of mostly closed-canopy Black Spruce-Tamarack (Larix laricina)-Red Maple (Acer rubrum) peatland. Because of their small size and rapid, erratic flight, the butterflies would easily have been overlooked had they not descended from the tops of Black Spruce to alight on Vaccinium shrubs. Their preference for the forest canopy was noted also by Scott (1986:369), and A. B. Klots, who further pointed out that I. lanoraieensis comes down to feed in the morning hours, moving progressively higher as the day proceeds (pers. comm. to R. Dirig). One individual was observed palpating the buds of Red Maple. Four males and one female were collected; identification was confirmed at Ottawa by Ross A. Layberry (Kinburn, Ontario) and J. Donald Lafontaine (Biosystematics Research Centre, Agriculture Canada, Ottawa). One male specimen was deposited at the Cornell University Insect Collection (CUIC) by Robert Dirig (Ithaca). On 9 May 1988 one individual of I. lanoraieensis was observed at the site; close by in the open, brushy areas of the bog were I. henrici (Grote and Robinson), I. niphon, and I. augustus (W. Kirby). Since then, I. lanoraieensis has not been seen again, and its status is at present uncertain. A recurring potential threat is the repeated aerial spraying of insecticide over Cicero Swamp in mosquito abatement efforts. The nearest known Canadian population occurs in the Ottawa area (Hall et al., 1984). It is hoped that this example of a Pleistocene relict (Pielou, 1991) has not been inadvertently eliminated.

Other central New York records of interest include a range extension of Pieris

napi oleracea (Harris), perhaps temporary, and the permanent residence of both *Asterocampa celtis* (Boisduval and Leconte) and *A. clyton* (Boisduval and Leconte); these species were all taken at the Lafayette Experiment Station, Onondaga County, July 1985. *Oeneis jutta* (Hübner), recently discovered in Adirondack bogs (Klass and Dirig, 1992:25), may also occur at Cicero; any information on it and *I. lano-raieensis* in this regard would be appreciated. It is likely that *I. lanoraieensis* is much more widespread in upstate New York, especially in Adirondack bogs, but has been overlooked because of its canopy-dwelling habits. In this respect its obscurity may be analogous to that of another canopy-dwelling species, the Early Hairstreak, *Erora laeta* (W. H. Edwards) (Pyle, 1981:466). Another rare New York State butterfly, *Phyciodes batesii* (Reakirt), was last known from Onondaga County, but may now be extirpated; the probable last site of collection has been destroyed by commercial development.—D. G. Miller III, Department of Environmental Science, Policy and Management, University of California, Berkeley, California 94720.

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LITERATURE CITED

- Collingwood, G. H. and W. D. Brush. 1984. Knowing Your Trees. The American Forestry Association, Washington, D.C., 392 pp.
- Ehrlich, P. and A. Ehrlich. 1961. How to Know the Butterflies. William Brown, Dubuque, Iowa, xiii + 262 pp.
- Hall, P. W., R. A. Layberry and J. D. Lafontaine. 1984. Butterflies of the Ottawa district, 1983 update. Trail and Landscape 18(3):112–114.
- Klass, C. and R. Dirig. 1992. Learning About Butterflies. New York State 4-H Member/Leader Guide 139-M-9. N.Y.S. Coll. of Agric. and Life Sciences, Cornell Univ. Ithaca, N.Y., 36 pp.
- Opler, P. A. and G. O. Krizek. 1984. Butterflies East of the Great Plains. The Johns Hopkins Univ. Press, Baltimore, xviii + 294 pp.
- Pielou, E. C. 1991. After the Ice Age: The Return of Life to Glaciated North America. Univ. Chicago Press, Chicago, ix + 366 pp.
- Pyle, R. M. 1981. The Audubon Society Field Guide to North American Butterflies. Alfred A. Knopf, New York, 916 pp.
- Scott, J. A. 1986. The Butterflies of North America. Stanford Univ. Press, Stanford, California, xvi + 583 pp.
- Shapiro, A. M. 1974. Butterflies and Skippers of New York State. Search. Vol. 4, No. 3. Agric. Exp. Sta. Cornell Univ. Ithaca, N.Y., 60 pp.

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